Shy Adolescents' Perceptions of Parental Overcontrol and Emotional Coldness: Examining Bidirectional Links

Nejra Bešić & Margaret Kerr
Örebro University
Abstract
Two kinds of parental behaviors—overcontrol and emotional coldness—have been linked with children’s shy behaviors. The questions we addressed are whether this applies to adolescent shyness, and whether shyness in itself might also affect parental behaviors. The participants were 916 7th-9th graders in a longitudinal project. We used a cross-lagged path model with three time points. Shyness predicted an increase in feeling overly controlled by parents at Time 2, which then predicted an increase in shyness at Time 3. Shyness also predicted an increase in perceived coldness-rejection by parents at Time 2. Finally, shyness predicted decreases in parental warmth at both timepoints. The effects did not differ for boys and girls. These results show that adolescent shyness predicts parental behaviors, though perhaps less strongly than in childhood. They also suggest some bidirectional effects in which parental responses to shy youths might serve to strengthen the shyness.

Keywords: shyness, parental behaviors, bidirectionality, adolescence
Shy Adolescents’ Perceptions of Parental Overcontrol and Emotional Coldness: Examining Bidirectional Links

Everyday wisdom about shy people is that they tend to be overlooked by those around them. Although they might be easy to overlook, they probably experience much private unhappiness, as adolescent shy behavior is linked to loneliness (Mounts, Valentiner, Anderson, & Boswell, 2006), having fewer friends (Asendorpf & Wilpers, 1998), and other internalizing problems such as anxiety, low self-worth (Jackson, Fritch, Nagasaka, & Gunderson, 2002), depression (Elovainio et al., 2004; Smith & Betz, 2002), social phobia (Heiser, Turner, & Beidel, 2003), and eating disorders in women (Troop & Bifulco, 2002). Shy behavior in adolescence seems to be particularly problematic in the long run, as it has been linked to poor romantic and sexual relationships, low self-esteem, and low subjective wellbeing in middle adulthood, whereas these links do not appear for childhood shyness (Kerr, 2001).

Shyness has been defined as the experience of wariness with unknown people and in new social encounters and novel places (Asendorpf, 1991; Cheek & Buss, 1981; Cheek & Watson, 1989). It overlaps conceptually with constructs such as behavioral inhibition, social anxiety, social withdrawal, and social reticence, as they all involve social fears (Crozier, 2000b). Like shyness, behavioral inhibition refers to a wariness of new social situations and new people, but also includes objects (Kagan & Snidman, 1991). Behaviorally inhibited children get distressed when meeting new people, are hesitant when approaching unknown adults, and tend to hover around other children without joining in play, and children characterized as shy behave similarly (Crozier, 2000b; Leary & Buckley, 2000). Social anxiety refers to the ongoing occurrence of uneasiness, negative ideation, and inept performance in social situations (Hartman, 1986). In this sense, social anxiety is similar to shyness, but somewhat broader (Crozier, 2000a). Social withdrawal is a consistent display of solitary behavior when encountering familiar or unfamiliar peers (Rubin & Asendorpf, 1993). It can have different underlying reasons, one of which might be anxiety or lack of social skills (Rubin & Asendorpf, 1993). In that case, social withdrawal can be a consequence of shyness. Finally, social reticence is a term used in literature where children are observed in play with other children and remain unoccupied, hovering around others (Coplan, Rubin, Fox, Calkins, & Stewart, 1994). Social reticence could also be interpreted as an end result of shyness (Carducci, 1999). The aforementioned concepts have all been found to show considerable overlap and similarity to shyness (Crozier, 2000b). Because shyness and these associated terms are related to current and future problems, one would like to understand what factors serve to maintain shy behavior or make it worse.

Most of the research on the development and maintenance of shy behavior has focused on children rather than adolescents. One of the most studied factors has been parental treatment. As a number of reviews show, different forms of socially anxious behaviors, such as shyness, behavioral inhibition, social anxiety, social withdrawal, and reticence are associated in young children with two forms of parental behavior: overcontrol and emotional coldness (Dadds & Barrett, 2001; Masia & Morris, 1998; Wood, McLeod, Sigman, Hwang, & Chu, 2003). Theoretically, one idea about overcontrol is that parents who shield their children
from demanding experiences or take control in stressful circumstances might teach them that the world is a dangerous place from which they need protection and over which they have little control (Rapee, 2001). Another idea is that overcontrol might obstruct the development of self-regulation and feelings of self-efficacy and autonomy in children (Hastings, Rubin, & DeRose, 2005; Mills & Rubin, 1998; Rubin, Cheah, & Fox, 2001; Rubin, Stewart, & Chen, 1995). This, in turn, might exacerbate children’s shyness. Consistent with these ideas, empirical findings show that mothers of shy children tend to overcontrol their children (Hastings et al., 2005; Rubin, Burgess, & Hastings, 2002; Rubin et al., 2001). Regarding emotional coldness, the theoretical idea is that as children are growing up, if they perceive their parents’ behaviors as rejecting, they might become preoccupied with others’ evaluative remarks (Grüner, Muris, & Merckelbach, 1999; Hudson & Rapee, 2001). This, in turn, may lead to a generalized fear of negative evaluation, an important component of shyness (Bruch, 1989). Empirically, it has been found that mothers of shy children show little warmth toward their children and tend to be cold or rejecting toward them (Grüner et al., 1999; Hudson & Rapee, 2001). Thus, there are well-developed theoretical ideas about the links between childhood shyness and parental behaviors, and the reported associations are consistent with those ideas.

During adolescence, however, youths’ needs and roles within the family change (Holmbeck, Paikoff, & Brooks-Gunn, 1995). Peers become increasingly important for adolescents (Bukowski, Gauze, Hoza, & Newcomb, 1991), and they spend less time at home and more with and under the influence of peers (Fuligni, Eccles, Barber, & Clements, 2001). Thus, compared with young children, whose lives mostly revolve around their parents, it is not as clear what might be expected regarding the link between shyness and parenting during adolescence. The few studies that have been done with adolescents have rested on similar ideas as those in childhood, but shyness has not been investigated to the same extent as more generalized anxiety or internalizing problems. Concerning generalized anxiety and internalizing problems, rejection and lack of warmth seem to increase the risk of developing internalizing problems for early adolescents (Muris & Merckelbach, 1998), and overcontrol and the absence of autonomy promotion by parents is believed to contribute to anxiety disorders (Siqueland, Kendall, & Steinberg, 1996). Parents of anxious youths have also been found to grant the youths less autonomy, and the youths report their parents as more overcontrolling than do non-anxious youths (Siqueland et al., 1996). Finally, anxious youths report their parents as less warm, less supportive, and more rejecting than non-anxious youths (Siqueland et al., 1996; Whaley, Pinto, & Sigman, 1999). In one study, however, measures of both generalized anxiety and shyness were used, and the associations with parental behaviors were much weaker for shyness than for anxiety, although all were significant (.10 vs. .21 for control and .14 vs. .30 for anxious rearing; Van Brakel, Muris, Bögels, & Thomassen, 2006). Thus, even though childhood shyness has been robustly linked to parental behaviors, and adolescent anxiety has been linked to similar aspects of parenting, the link between adolescent shyness and parenting cannot be considered firmly established.

Another question that arises from the literature on shyness and parenting is whether shyness might actually affect parental behaviors as much as parental behaviors affect shyness. Some researchers have suggested that small children
who are temperamentally shy will probably elicit different behavioral responses from their parents than non-shy children (Mills & Rubin, 1993; Rubin et al., 2002; Rubin & Mills, 1991; Rubin et al., 1995). Shy children who get exposed to novel social conditions are often more “difficult” and more easily aroused than non-shy children (Kagan, Reznick, & Snidman, 1987). These characteristics might make it harder for parents to soothe and comfort shy children, and this might elicit cold, rejecting behaviors from parents (Rapee, 2001; Rubin & Mills, 1991). Furthermore, researchers have argued that shyness early on in childhood might evoke overcontrolling responses by parents (Rubin et al., 2002; Rubin & Mills, 1990, 1991; Rubin et al., 1995). That is, when parents recognize the child’s social insecurities and the anxiety that goes along with it, they might respond with overcontrol (Rubin et al., 2002; Rubin & Mills, 1990, 1991; Rubin et al., 1995). Parents might even think they are helping by being assertive or directive, but they might, instead, reinforce shyness or social fearfulness (Rubin et al., 2002; Rubin & Mills, 1990, 1991; Rubin et al., 1995). Thus, there are well-developed ideas about the possible mechanisms through which parental behaviors and children’s shyness might affect one another, but because of the cross-sectional designs of most studies, little is known about bidirectional effects between parenting and shyness in either childhood or adolescence.

Several appeals for longitudinal, bidirectional studies have been voiced in the literature, but so far only a couple of longitudinal studies have been reported. One study of toddlers examined bidirectional links between shyness and parental behaviors (Rubin, Nelson, Hastings, & Asendorpf, 1999). Children’s shyness, as reported by the parents, predicted a lack of encouragement of independence from parents over a period of two years, but not the other way around. To our knowledge, there is only one longitudinal study involving adolescents (Papini & Roggman, 1992). In this study, however, the issue of interest was how the links between social anxiety and parenting changed over the transition to adolescence, so the data were analyzed within time points, and prediction of change across time was not addressed. In sum, no study has directly examined the direction of effects between shyness in adolescence and parental behaviors.

In this study, we examine the directional links between adolescent shyness and two broad facets of perceived parental behaviors—overcontrol and emotional coldness. Using three waves of longitudinal data from 7th-9th graders in a community-based sample, we estimate directions of effects with a cross-lagged path model. We ask whether parents’ behaviors lead to shyness, whether shyness seems to elicit parental behaviors, or both. Specifically, the questions are: what are the directions of effects between youths’ shyness on the one hand, and parental overcontrolling and emotionally cold behaviors on the other? We conduct one model examining three different measures of parental behaviors simultaneously. Finally, we conduct multiple group comparisons between boys and girls using the same model in order to examine whether these links differ between girls and boys.
Method

Participants

The data are from a 5-wave, longitudinal, community-based study conducted in a city in Central Sweden with a population of about 26,000. The first data collection took place in the fall of 2001, and was followed up yearly, with approximately one year between the waves. The unemployment rate in the community at the onset of the study was similar to that in the rest of the country, as was the proportion of single-parent households. Mean incomes were about 4.0% lower than in the rest of Sweden.

Shyness was assessed during Waves 3-5. For this study, the target sample was youths in grades 7-9 at Wave 3 or Time 1 ($n = 981$). If the participants had missing data for all three timepoints on any of the variables for the latent parenting constructs, they were removed from the data set. Thus, they might lack data for one or two timepoints on a construct, but not for all three. Sixty-five participants met this criterion and were thus removed from the data set. They tended to have a large percentage of other missing data as well—between 6-87% for all variables used in the study. The final analytic sample, then, included 916 youths at Time 1 ($M_{age} = 14.25$; 444 girls and 472 boys); 785 youths at Time 2 ($M_{age} = 15.06$; 366 girls and 419 boys); and 703 youths at Time 3 ($M_{age} = 16.01$; 332 girls and 371 boys).

We addressed missingness in the data by using the Full Information Maximum Likelihood Estimation (FIML) method. This procedure computes maximum likelihood parameter estimates and standard errors for a given model using all available information from the observed data, including cases with missing values (Enders & Bandalos, 2001). The method is considered to provide less biased estimates than listwise or pairwise deletion, and is suitable to use when data are not missing completely at random (Schafer & Graham, 2002). By using a covariance “coverage” matrix in MPlus, one can calculate the proportion of missing values in the dataset (Muthén & Muthén, 1998-2007). This calculation yields an estimated proportion of all available observations for each variable. In this study, 403 youths, or 44% of the sample at Time 1 had a complete dataset (i.e., all scales present for all timepoints). Overall, youths in the analytical sample had data coverage ranging from $.54$ to $.97$ for all the scales used in the study, meaning that they had between 54 and 97 percent of data available. We also compared the 65 participants we removed from the data set with the analytic sample, using logistic regression analysis to determine whether any of the following variables predicted attrition: gender, age, immigrant status, and family status. Significant results emerged for immigrant status (OR = 2.55, $p = .02$) and family status (OR = .33, $p = .00$), showing that youths in the analytic sample were more likely than those lost to attrition to be immigrants and have parents who were not divorced. The 7th, 8th, and 9th graders in the analytic sample came from 7 different classrooms, and were evenly distributed among the classrooms for each grade; 9.4% were born in a country outside of Sweden. At Time 1, 68% of the youths lived in households with both biological parents, whereas 13% lived with one stepparent and one biological parent; 18% lived in single-parent households.
Procedure
Youths were recruited in their classrooms during school hours. They were informed about what kinds of questions they would answer in the questionnaires, and how long it would take to finish them. They were also told that participation was voluntary and that they could do something else, should they choose not to take part. They were guaranteed that if they did participate, their answers would not be revealed to anyone outside of the project (for example, parents or teachers). Parents were informed about the study beforehand in meetings held in the community and by mail. They received a postage-paid card to return in case they did not want their child to take part in the study (1% of the parents did so). They were also informed that they could withdraw their child from the study at any time they pleased. Youths filled out the questionnaires during regular school hours in sessions administered by trained research assistants. Teachers were not present at the time. No one was paid for participating, but for each of the classes in grades 4 to 6 we donated to the class fund, and in each of the classes in grades 7 through 12 we held a drawing for movie tickets. Everyone who stayed in the room, whether participating or not, was qualified for the drawing. Overall youth participation rates were over 90% each year. The procedures and measures were approved by the University’s Ethics Review Board at the start and again at the mid-point of the longitudinal study.

Measures

Shyness
Shyness was measured with questions about social fears in eight different situations (Furmark et al., 1999). The items involved situations or behaviors similar to those that distinguish shy individuals from others, as they measure a wariness in social situations (Cheek, Melchior, & Carpentieri, 1986). The items were about speaking in front of the class, putting a hand up during class, making a phone call to someone one does not know, being with classmates during breaks, going to a party, initiating conversation with someone one does not know very well, eating with others during lunch, and looking in someone’s eyes while speaking. The participants rated themselves on a three-point scale, ranging from having “no fear” to “a lot of fear” of these situations. The alpha reliabilities were .74 for Time 1, .72 for Time 2, and .74 for Time 3. The cross-year correlations between the scales ranged from .48 to .64.

Parental Overcontrol
Youths were asked about their perceptions of their parents’ overly controlling behaviors. This included questions about feeling overly controlled and perceiving a lack of influence in family decisions.

Feeling overly controlled. There were five items measuring whether youths felt overly controlled by their parents (Kerr & Stattin, 2000). The items were: “Do you think your parents give you enough freedom to do what you want during your free time,” “Does it feel like your parents demand to know everything,” “Do you think your parents control everything in your life,” “Do
you think your parents butt into what you do in your free time,” and “Do you
feel like you can’t keep anything to yourself, because your parents want to know
everything?” The five-point scale ranged from “yes, always” to “no, never.” The
alpha reliabilities were .80 for Time 1, .82 for Time 2, and .88 for Time 3. The
cross-year correlations between the scales ranged from .50 to .62.

**Influence in family decisions.** This scale was developed in this project
to measure how much influence youths felt they had at home. Youths replied
using a four-point scale ranging from “don’t agree at all” to “agree completely.”
The items were “Your parents listen to you when decisions are to be made in the
family,” “You feel like you have influence and are partaking in things that
happen in your family,” “Your parents let you take part when you are going to
decide something in the family,” “If you have other points of view, then these
viewpoints can change decisions taken in the family,” “Your parents ask you
when decisions are to be made in the family,” and “When you are having a
discussion at home, you usually get to finish what you have to say.” These items
were reversed, so that higher scores meant less influence (and thus more
overcontrol). The alpha reliabilities were .88 for Time 1, .88 for Time 2, and .89
for Time 3. The cross-year correlations between the scales ranged from .44 to .59.

**Parental Emotional Coldness**

We used positive and negative indicators of emotional coldness: parental warmth
and coldness-rejection. Both measures included separate reports for mothers and
fathers. These emotional responses to the youth were considered likely to differ
between mothers and fathers, whereas the overcontrol measures were thought to
reflect a family management strategy that parents largely shared.

**Warmth.** Youths were asked about how warm they perceived their
mothers and fathers to be, respectively (Kerr & Stattin, 2003). The six items were
“Your mom/Your dad”: “Praises you for no special reason,” Shows he/she cares
for you with words and gestures,” “Does small things to make you feel special
(e.g., winks, smiles),” “Constantly shows how proud he/she is of you,” “Focuses
on the positive and seldom on the negative things you do,” and “Always shows
his/her love to you without any reason – almost regardless of what you do.” The
response items ranged from “never” to “most often” on a three-point scale. The
alpha reliabilities for the items about mothers were .84 for Time 1, .85 for Time
2, and .87 for Time 3. The alpha reliabilities for the items about fathers were .86
for Time 1, .86 for Time 2, and .88 for Time 3. The cross-year correlations
between the scales ranged from .49 to .58 for the measures about mothers, and
from .48 to .55 for the measures about fathers. The correlations between fathers’
and mothers’ scales ranged from .34 to .69.

**Coldness-rejection.** The youths were asked four questions about their
mothers’ and fathers’ cold, rejecting behavior toward them. These items were part
of an instrument created in this project to capture parents’ negative and positive
reactions to youth wrongdoing. Youths were asked how their parents typically
reacted when they had done something their parents really did not like. The
coldness-rejection items were “Doesn’t talk to you until after a long while,” “Is
silent and cold towards you,” “Disregards your views or ideas,” and “Avoids
you.” The response items were on a three-point scale, ranging from “never” to
“most often.” The alpha reliabilities for the scales concerning mothers were .78
for Time 1, .75 for Time 2, and .81 for Time 3. The alpha reliabilities for the scales concerning fathers were .79 for Time 1, .78 for Time 2, and .82 for Time 3. The cross-year correlations between the scales ranged from .35 to .40 for the mothers’ measures, and from .40 to .42 for the fathers’ measures. The correlations between the fathers’ and mothers’ scales ranged from .22 to .71.

**Analyses**

We conducted structural equation modeling (SEM) for assessing directional associations between shyness and the various aspects of parental behaviors. We used the MPlus 4.0 software (Muthén & Muthén, 1998-2007) with the FIML (Full Information Maximum Likelihood) procedure for all analyses presented below. The FIML procedure allowed for the use of raw data for the final sample. Two indices of model fit were used: the Root Mean Square Error of Approximation or RMSEA (Browne & Cudeck, 1993) and the Comparative Fit Index or CFI (Bentler, 1990). An RMSEA less than .08 is considered an acceptable fit, whereas a value less than .05 is considered a very good fit (Browne & Cudeck, 1993). In addition, CFIs with values greater than .95 are considered acceptable fit, whereas values greater than .97 are considered good fit (Bentler, 1990).

**Cross-lagged path model**

In order to test the reciprocal effects between youths’ shyness on the one hand, and parental overcontrol and emotional coldness on the other hand, we tested a cross-lagged model with three timepoints. The lag between adjacent times of measurement was approximately one year. To test whether shyness at Time 2 influences parenting behaviors at Time 3, the effect of shyness at Time 2 on parenting at Time 3 should be statistically controlled. This model allows assessment of the predictive change (i.e., increase or decrease) from one timepoint to another, without prior relationships between the same constructs confounding the results (MacCallum & Austin, 2000).

**The measurement model**

First, to identify the measurement model, we conducted a confirmatory factor analysis (CFA) in MPlus for all three parenting constructs. In Table 1, the latent variables are listed with their respective manifest indicators and factor loadings for the variables concerning parental behavior. The manifest variables indicating feeling overly controlled by parents, parental warmth, and parental coldness-rejection were factor analyzed in one model to specify a three-factor solution within each wave. As Table 1 shows, the factor loadings for the latent variables ranged from .47 to .89 (all $p$s < .001). The correlations between the latent variables for all the parenting constructs are shown in Table 2. They were significantly correlated at all timepoints (all $p$s < .001). In addition, the model showed that the three latent constructs were distinctively different factors. The model indicated a good fit ($\chi^2 = 406.64$, df = 87, $p = .0000$, RMSEA = .06, CFI = .95), meaning that the indicators reflected the latent constructs very well. Thus, it
was considered sound to use the two indicators for each latent construct representing the three parenting behaviors. In addition, the correlations showed that the measures are significantly different from each other, and thus measuring three separate constructs.

**The structural model**

After identifying the measurement model, we added the structural relationships between the latent variables. At this point, the cross-lagged paths and covariations between shyness and the other constructs at each wave were added. The covariations between all the parenting constructs were included as well. According to recommendations, the unstandardized factor loadings were set equal to 1 while the other loadings were set equal across time, the variances of the latent variables were set free, and the error variances as well as the unstandardized coefficients were constrained to equality (Jöreskog & Sörbom, 1996). Error terms of the same measured variables assessed at different times were interpreted as correlated with each other because of the assumption that factors contributing to measurement error will be consistent across time (Martens & Haase, 2006). For the latent variables with only one indicator (e.g., shyness), error variances were set to zero. The final model included shyness and the following latent variables: (a) Feeling overly controlled by parents, (b) Parental warmth, and (c) Parental coldness-rejection.

**Results**

**Directional Relations Between Shyness and Perceived Parenting**

To examine the possibility that parental behaviors are responses to adolescent shyness as well as precursors of it, we examined the cross-lagged paths from the model described above. The results are presented in Figure 1. The model had a good fit to the data ($\chi^2 = 870.39; df = 149; p = .0000; \text{RMSEA} = .07; \text{CFI} = .91$). Only the coefficients for significant paths are depicted in the figure. Additionally, in the interests of clarity, neither the covariation paths between the parenting constructs nor the coefficients for the stability paths are depicted in the figure. The latent constructs showed good stability over time for shyness (.62 and .60) and feeling overly controlled (.74 and .71); and somewhat less stability for parental warmth (.55 and .56) and coldness-rejection (.48 and .42) (all $p$s < .001). In addition, some covariation paths between shyness and the parenting constructs were significant for Time 1 (.24 for feeling overly controlled; -.14 for parental warmth, and .06 for coldness-rejection) and Time 2 (.04 for feeling overly controlled and -.08 for parental warmth) (all $p$s < .05). Overall, the model shows more evidence for shyness influencing parenting than for parenting influencing shyness. Shyness at Time 1 predicted increases from Time 1 to Time 2 in feeling overly controlled, lack of parental warmth, and coldness-rejection, with the strongest unique link being for coldness-rejection. Also, increases in shyness from Time 1 to Time 2 predicted decreases in parental warmth from Time 2 to Time 3. The only path from parenting to shyness that reached significance at the .05-level showed that increases in feeling overly controlled from Time 1 to Time 2
predicted subsequent increases in shyness. We should mention, however, that the path from warmth at Time 1 to shyness at Time 2 was marginally significant ($p < .10$). The coefficients for the non-significant paths ranged from -.04 to .07. Overall then, the results suggest that in adolescence shyness influences perceived parenting more than perceived parenting influences shyness. Perceived parental overcontrol, however, does seem to increase shyness.

**Gender Differences**

Do boys and girls differ in the directional relations between shyness and perceived parenting? To answer this question, we conducted multiple group comparisons in MPlus. After constraining all paths to equality between girls and boys, we freed all paths of interest and tested differences in model fit between this model and the fully constrained model with chi-square difference tests. As a first step, then, all paths were constrained to be equal between the two groups, thus stating that there were no differences between the genders ($\chi^2 = 1309.01; \text{df} = 361; p = .0000$). As we did not know on which paths to expect differences between genders, we released all cross-paths in the model at once. Thus, as a second step, all of the cross-lagged paths were set free, allowing them to differ between girls and boys ($\chi^2 = 1295.40; \text{df} = 347; p = .0000$). The differences between the chi-squares and the degrees of freedom were then tested in a chi-square difference test, which was non-significant ($\chi^2_{\text{difference}} = 13.63; \text{df}_{\text{difference}} = 14; p = .48$). Thus, we concluded that girls and boys did not differ significantly on the links between shyness and parenting in this model.

**Discussion**

How parents might contribute to their children’s shyness has been extensively discussed in the developmental literature. Concerning adolescence, however, much less is known. Moreover, there is little longitudinal research on parental behaviors and adolescent shyness, and none of it has examined directions of effects. This leaves open the possibility that adolescent shyness in part elicits the same parental behaviors that end up making it worse. Many studies on shyness and other related constructs such as behavioral inhibition, social anxiety, social withdrawal, and reticence, have examined the link to parental behaviors in childhood. Adolescents have been widely overlooked in the literature on shyness and parenting, even though adolescent shyness is more connected to behavioral problems later in life than is childhood shyness (Kerr, 2001). In this study, however, we found evidence that parents react to youth shyness with increased overcontrol and emotional coldness and decreased warmth. Overcontrol, in turn, seemed to increase shyness. Thus, our findings are in line with other recent research portraying youths as active agents in their relationships with their parents and parental behaviors as both action and reaction (see e.g., (Kerr & Stattin, 2003).

This is the first study to our knowledge that has employed structural equation modeling with a large number of participants to address the question about the directions of effects between youth shyness and parents’ childrearing practices. Researchers have previously pointed out the importance of examining bidirectional links between parental behaviors and shyness, but there is only one
study in which this has been done, and that was with children (Rubin et al., 1999). Thus, this study is unique in the developmental literature.

Although we found evidence for both directions of effects in this study, the evidence for youths’ shyness effecting parents’ behavior was somewhat more robust; therefore, some speculations about these relations are warranted. The strongest unique link in the model was from shyness to increased coldness-rejection, and shyness was also linked to decreased warmth. Because parenting behaviors were reported by youth, we cannot rule out that shy youths misperceived their parents’ behaviors, but if youths’ perceptions were accurate, there are several ways in which these reactions could be explained. To begin, parents might view shyness as an undesirable trait, and they might be concerned about their youth’s behavior. In one study, mothers viewed negative behaviors, such as different forms of perceived misconduct, as more intentional and dispositional if their children were older than when they were younger, and the more they believed these behaviors to be intentional, the more upset they got (Dix, Ruble, & Zambarano, 1989). If this could be extended to shy adolescents, one could reason that parents might feel their youths are isolating themselves socially on purpose, and their lack of warmth and coldness-rejection might reflect frustration or concern that is not properly expressed. Another possibility is that there is some correlate of shyness that helps to explain parents’ cold, rejecting reactions. In a recent study, shy youths were found to be over-represented among adolescent peer crowds, such as Punks and Goths, that adopt unconventional, even startling, styles of hair, makeup, and clothing; for instance, green, spiky hair or white face paint with painted-on blood stains around the eyes (Bešić & Kerr, in press). These peer crowds tend to be small, so parents’ reactions to these styles is unlikely to be a complete explanation of the effect, but it might be one part of a multi-determined phenomenon. Whatever the explanation, these reactions cannot be beneficial for youths or parent-youth relationships. Thus, a better understanding of this phenomenon might ultimately lead to parent education efforts that can improve parent-youth relationships.

The findings for overcontrol showed clearer evidence for bidirectional effects, however, and there are several ways in which this could be understood. One explanation why shy youths might feel increasingly overcontrolled by parents is that they might be overly sensitive to control. Perhaps shy youths are good at picking up any kinds of signs of control and over-interpreting them. Shy children who are more negative as infants seem to be more influenced by different forms of parental behaviors than shy children with less negativity (Park, Belsky, Putnam, & Crnic, 1997), which suggests that at least some shy youths might be especially sensitive to parental behavior. An alternative possibility, however, is that parents are indeed applying overcontrol. They might, for instance, be taking over social situations and doing things in order to shield shy youths from possible embarrassment or shame due to their shyness. Consistent with theoretical ideas in the literature on childhood shyness, highly controlling parents both encourage the development of shy behavior and react to it with increased overcontrol (Dadds & Barrett, 2001; Masia & Morris, 1998; Wood et al., 2003). If this is the case, the results in this study could be part of an ongoing pattern of parent-child interactions. This is one issue to be clarified in future research.

Many of the youths in this study were undergoing multiple transitions—school transitions and pubertal transitions. We do not know to what extent these
transitions might have had differential effects on shy youths and the parent-child relationships of shy youths. For shy youths, a transition to a new school environment, with new friends and unknown teachers might be particularly difficult, and there is some evidence for this in the literature. Some researchers have hypothesized that the transition to junior high school might increase the impact of a lack of parental acceptance or emotional coldness on anxious children’s emotional well being (Papini & Roggman, 1992). Friends can buffer stressful experiences such as school transition or difficulties with parents (Cohen, Sherrod, & Clark, 1986), but shy youths tend to have fewer friends (Asendorpf & Wilpers, 1998) and experience more loneliness during the transition from high school to college (Mounts et al., 2006). Indeed, previous research shows that the buffering effects of friends on school transition only occurs for individuals low in social anxiety (Cohen et al., 1986). Further research is warranted on how lack of friends might impact shy youths’ perceptions of parenting and how various transitions might affect shy youths more than others.

In addition to overcontrol and emotional coldness, there are other ways in which parental behaviors might influence children’s and youths’ shyness that have not been considered in this study. For example, parents who are excessively troubled with other people’s views may create a fear of negative evaluation in their children due to their constant reminders that other people are noticing the children’s appearance and social behaviors (Buss, 1980). Parents of shy children are thought to bring their children up in non-sociable environments, perhaps due to their own anxieties and social fears (Bruch & Heimberg, 1994). As they are solely in charge of organizing social opportunities and interactions for their children when children are young, parents have a big influence on their young children’s everyday social interactions (Beidel & Morris, 1995). These alternative explanations remain to be explored.

To what extent might these findings be influenced by the Swedish cultural context, or even be specific to our Swedish sample? Even though Sweden is generally thought of being ideologically similar to other Western European countries, previous research suggests that shyness is better accepted in Sweden than in many other Western societies (Kerr, 2001). Additionally, some differences between Swedes and Americans have been identified regarding how shyness affects career and marriage paths in men and women, although many similarities were also found (Kerr, Lambert, & Bem, 1996). The link between parenting and social withdrawal also differs across cultures (Nelson, Nelson, Hart, Yang, & Jin, 2006). However, if Swedish people accept shyness better than people in other Western societies, our results might be conservative regarding the directional links between shyness and parenting. That is, despite the fact that shyness is more accepted in Sweden, it still seems to affect parenting negatively. From this reasoning, it follows that the links between shyness and parenting in early adolescence might turn out to be even stronger in societies in which shyness is less accepted than in Sweden. It would be of interest to replicate these findings with samples from other cultures.

The current study has several limitations that should be mentioned. First, we only have youths’ reports of shyness. Multiple reports of the participants’ shyness status by parents or other observers might have been preferable. Early work on shyness, however, suggests that individuals themselves might be the only valid informants of their social fears, because those who experience shyness do
not always appear shy to others (Zimbardo, 1977). Indeed, Zimbardo (1977) concluded that individuals should be considered shy if they, themselves, say that they are shy, regardless of how they appear to others. A second limitation is that we are lacking parents’ own reports of their behaviors. Theoretically, as we are only using youth reports of parenting, our results might be showing what is merely going on in the youths’ minds. Research has shown that parents and youths do not necessarily agree on aspects of parental behaviors (Sessa, Avenevoli, Steinberg, & Morris, 2001); however, it seems that children can sometimes be better reporters of what goes on in the family than parents are, as the children’s reports have been found to correlate more highly with observer’s reports of parental behaviors than do parent’s own reports (Sessa et al., 2001). A third limitation is the moderate degree of stability found primarily for the parenting variables. There is more change that can be predicted in these moderately stable parenting variables than in the more stable shyness variables, and this might explain why shyness was a stronger predictor of parenting than parenting was of shyness. However, these findings might reflect the psychological reality as much as the statistical reality. Shyness is often viewed as stable trait (Briggs, 1988), and as such it might affect parenting behaviors, which presumably are not as trait-based, more than parenting affects shyness. Despite these limitations, the study has several strengths, including the large sample and the longitudinal design over three years. This study represents an attempt to fill what several scholars have pointed out as a gap in understanding of the development of shyness: directions of effects between shyness and parenting behaviors. As such, it contributes uniquely to the current knowledge about youth shyness.

Parents cannot choose what predisposition their children will have, nor do children get to choose how their parents will react to them. Our study shows that youths’ behavioral characteristics, such as shyness, might play just as big a role in shaping parental behaviors as parental behaviors do in shaping youth behavior. This does not mean that parents have nothing to do with how their children turn out. It is merely a reminder of the complexity of developmental processes. Shyness is often seen as something negative in today’s Western society, as it also results in poorer peer relationships (Asendorpf & Wilpers, 1998), social lives (Mounts et al., 2006), romantic involvement (Kerr, 2001), and emotional adjustment (Ellovainio et al., 2004; Jackson et al., 2002; Smith & Betz, 2002). Being shy can be somewhat of a stigma today, as social competence is valued over bashfulness. The guilt and embarrassment about their children appearing awkward around others might prompt parents to be psychologically controlling or to act in a less warm or a more cold-rejecting manner in hopes of avoiding embarrassing situations or getting their child to change. Essentially, however, all of these interactions are products of both parties involved. Maybe parents whose children show shy behavior can help by being aware of their children’s oversensitivity and their own responses to their children.
References


Jackson, T., Fritch, A., Nagasaka, T., & Gunderson, J. (2002). Towards explaining the association between shyness and loneliness: A path analysis with American college students. Social Behavior and Personality, 30, 263-270.


Table 1. *Latent Variables and Their Manifest Indicators for the Measures of Youth-Reported Parental Behaviors With Factor Loadings for the Respective Indicators*

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Manifest Indicator</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling Overly Controlled T1 - T3</td>
<td>1. Feeling Overly Controlled T1</td>
<td>.46 *</td>
</tr>
<tr>
<td></td>
<td>2. Lack of Influence at Home T1</td>
<td>.74 ***</td>
</tr>
<tr>
<td></td>
<td>1. Feeling Overly Controlled T2</td>
<td>.52 *</td>
</tr>
<tr>
<td></td>
<td>2. Lack of Influence at Home T2</td>
<td>.79 ***</td>
</tr>
<tr>
<td></td>
<td>1. Feeling Overly Controlled T3</td>
<td>.49 *</td>
</tr>
<tr>
<td></td>
<td>2. Lack of Influence at Home T3</td>
<td>.87 ***</td>
</tr>
<tr>
<td>Parental Warmth T1 - T3</td>
<td>1. Mothers’ Warmth T1</td>
<td>.85 *</td>
</tr>
<tr>
<td></td>
<td>2. Fathers’ Warmth T1</td>
<td>.79 ***</td>
</tr>
<tr>
<td></td>
<td>1. Mothers’ Warmth T2</td>
<td>.85 *</td>
</tr>
<tr>
<td></td>
<td>2. Fathers’ Warmth T2</td>
<td>.81 ***</td>
</tr>
<tr>
<td></td>
<td>1. Mothers’ Warmth T3</td>
<td>.84 *</td>
</tr>
<tr>
<td></td>
<td>2. Fathers’ Warmth T3</td>
<td>.79 ***</td>
</tr>
<tr>
<td>Parental Coldness-Rejection T1 - T3</td>
<td>1. Mothers’ Coldness-rejection T1</td>
<td>.81 *</td>
</tr>
<tr>
<td></td>
<td>2. Fathers’ Coldness-rejection T1</td>
<td>.81 ***</td>
</tr>
<tr>
<td></td>
<td>1. Mothers’ Coldness-rejection T2</td>
<td>.84 *</td>
</tr>
<tr>
<td></td>
<td>2. Fathers’ Coldness-rejection T2</td>
<td>.75 ***</td>
</tr>
<tr>
<td></td>
<td>1. Mothers’ Coldness-rejection T3</td>
<td>.83 *</td>
</tr>
<tr>
<td></td>
<td>2. Fathers’ Coldness-rejection T3</td>
<td>.79 ***</td>
</tr>
</tbody>
</table>

*Factor loading set equal to 1, thus generating no t-value.*
Table 2. *Results From the Confirmatory Factor Analysis Showing Correlations Between All Latent Constructs*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling overly controlled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Time 1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Time 2</td>
<td>.79</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Time 3</td>
<td>.62</td>
<td>.76</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental warmth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Time 1</td>
<td>-.81</td>
<td>-.55</td>
<td>-.48</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Time 2</td>
<td>-.67</td>
<td>-.78</td>
<td>-.60</td>
<td>.55</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Time 3</td>
<td>-.58</td>
<td>-.65</td>
<td>-.81</td>
<td>.54</td>
<td>.57</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental coldness-rejection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Time 1</td>
<td>.52</td>
<td>.40</td>
<td>.32</td>
<td>-.33</td>
<td>-.24</td>
<td>-.27</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. Time 2</td>
<td>.43</td>
<td>.56</td>
<td>.36</td>
<td>-.28</td>
<td>-.46</td>
<td>-.34</td>
<td>.44</td>
<td>-</td>
</tr>
<tr>
<td>9. Time 3</td>
<td>.38</td>
<td>.44</td>
<td>.47</td>
<td>-.27</td>
<td>-.30</td>
<td>-.40</td>
<td>.39</td>
<td>.41</td>
</tr>
</tbody>
</table>

Note: All correlations were significant at $p < .001$. 
Figure Caption

Figure 1. Cross-lagged path model with shyness and the three parenting constructs: Feeling overly controlled by parents, parental warmth, and parental coldness-rejection.

Note. All within-time correlations and stability paths were included in the model. For clarity, only significant cross-paths are shown.

*p < .05, **p < .01, ***p < .001